Statewide Transit-Oriented Development Study: Factors for Success in California

EXECUTIVE SUMMARY

BUSINESS, TRANSPORTATION, and HOUSING AGENCY

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Business, Transportation and Housing

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“ Transit Oriented Development (TOD) is moderate to higher density development, located within an easy walk of a major transit stop, generally with a mix of residential, employment and shopping opportunities designed for pedestrians without excluding the auto. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use.”

Technical Advisory Committee to the Statewide Transit-Oriented Development Study

The American Plaza in downtown San Diego, CA
Metropolitan Transit Development Board (MTDB) in San Diego has TOD projects and plans in place at over 15 of the system's 49 light-rail stations

TOD is an effective strategy to help manage California's growth and improve its quality of life.

Overview

This study has taken a comprehensive look at the 'state-of-the-practice' of transit-oriented development (TOD) in California and across the United States. This 14-month study began in September, 2000 and was completed early in 2002.

The major objectives of this study were to: Define transit-oriented development and its successful components; describe the potential benefits of TOD; examine the status of implementation of TOD in the U.S. and California; identify the major barriers and impediments to the wider implementation of TOD; identify what is working well, as well as the need for additional resources to overcome barriers; and, finally, develop a set of potential strategies and activities that the state of California may implement to facilitate the broader implementation of TOD in this state.

The study was guided by two advisory committees that included representatives of state and local government agencies, transit providers, private developers, financial institutions, environmental groups, and others. (Members of these committees are listed inside the back cover). It also involved interviews with private developers and with staff members of numerous local jurisdictions, transit agencies, and other organizations.

This process has resulted in the publication of a final report, *"Statewide Transit-Oriented Development Study: Factors for Success in California",* that contains up-to-date and practical information on TOD. Separate from the final report, a Technical Appendix volume contains: an overview of TOD in America; detailed information about twelve TODs in California; information on funding sources; and other resources. In addition, the study team produced a special report that examines parking in TODs. All of these reports are available, at:

http://www.dot.ca.gov/hq/MassTrans/tod.htm

Calthorpe Associates

Richmond Transit Village, Richmond, CA
The Metropolitan Transportation Commission (MTC) has set aside $54 million in flexible federal funds for the Transportation for Livable Communities Program (TLC).

Whisman Station, Mountain View, CA
The City of Mountain View in the San Francisco Bay Area has taken a leadership role in providing a framework for TOD.

From 1990 to 2000, California invested approximately 14 billion dollars on mass transportation

What is Transit-Oriented Development?

TOD is a strategy that has broad potential in both large urban and small communities using bus or rail transit systems. It focuses compact growth around transit stops, thereby capitalizing on transit investments by bringing potential riders closer to transit facilities and increasing ridership. TOD can also produce a variety of other local and regional benefits by encouraging walkable compact and infill development. Transit agencies often play an important role in TOD. Local governments can play a significant role in promoting TOD through plans, policies, zoning provisions, and incentives for supportive densities, designs, along with a mix of land uses.

For development to be transit-oriented, it needs to be more than just *adjacent* to transit. Development generally needs to be shaped by transit in terms of parking, density, and/or building orientation in comparison to conventional development for it to be considered transit-oriented. A successful TOD will reinforce both the community and the transit system.

Successful TOD implementation typically involves a number of elements such as: optimal transit system design; community partnerships; understanding local real estate markets; planning for TOD; coordination among local, regional, and state organizations; and providing the right mix of planning and financial incentives and resources.

Why TOD in California?

Over the next 20 years, California is expected to add 11-16 million new residents and over four million new households. This unprecedented growth is more than California experienced during the 1950s, 1960s, and 1970s, combined. California's success at managing this growth will determine its future prosperity, the quality of its environment, and overall quality of life for its residents.

TOD is a strategy to help manage this growth and improve California's quality of life. TOD provides communities with an alternative to the consequences of low-density suburban sprawl and automobile- dependent land use patterns. In addition, TOD can help answer California's dramatic need for more affordable housing.

Parsons Brinckerhoff

Posey's Corner, Sacramento, CA
Sacramento Regional Transit has recast its role in transit-oriented development with a major TOD planning program underway for the eastward Folsom Corridor and South Line light-rail extensions.

By aligning transit investments with a community's vision for how it wants to grow, TOD seeks to create mixed-use, denser, walkable "transit villages". By implementing TOD, California can make significant progress towards improving its quality of life by coordinating investments in transportation and land use projects.

The Federal Transit Administration now gives priority for funding of proposed rail transit projects to areas with transit-supportive land use policies and practices. If California expects to be able to successfully compete nationwide for limited federal rail transit funds, we need to pay attention to implementing TOD.

Need for Mobility Options

Accompanying significant population and employment growth is the concern over increasing traffic congestion and lengthening commute times. From 1990 to 2000, as the state's population grew by 13.6%, the average time people spent commuting increased by nearly 4% . That trend is expected to increase into the future.

From 1990 to 2000, the state of California invested approximately 14 billion dollars of state funds on mass transportation programs and projects. These investments, along with California's congested roads and freeways, have helped reverse a long trend of decline in transit ridership.

TOD Profile: Ohlone-Chynoweth, San Jose

Ohlone-Chynoweth on the Guadalupe Light Rail line in San Jose includes housing and community facilities developed on an under used light-rail park-and-ride lot.

The former 1,100-space park-and-ride lot now includes a variety of uses: 240 park-and-ride spaces, 330 units of affordable housing, 4,400 sq. ft. of retail, and a day care center. At 27 dwelling units per acre, the residential density is relatively high compared to the single family neighborhood nearby.

The $31.6 million project included $14.5 million in tax-exempt bonds, $10.5 million in tax credit equity, a $5.2 million loan from the City to support affordable housing, $824,000 in federal transportation funds for improvements, a $500,000 Affordable Housing grant, and $350,000 State Proposition 1 funds to reimburse the school fee.

Los Angeles Neighborhood Initiative

North Hollywood Transit Park, Los Angeles, CA **BEFORE**

AFTER

The City of Los Angeles adopted "A Transportation/Land Use Policy for Los Angeles," in 1993 to guide TOD planning. TOD plans have been adopted for four Red Line subway stations and several stations on the Pasadena Blue light-rail line.

California's transit use is increasing 40% faster than the average national rate. In 1999, two of California's transit systems had the hightest increases in ridership in the nation.

However, despite California's impressive investment in transit, most of California's future growth will likely continue to follow typical "sprawl" development patterns. The result would be higher costs of local services, continued loss of farmland and open space, and increased dependence on automobiles. Consequently, the total number of annual 'vehicle miles traveled' in California is expected to increase from 296 billion miles in 2000 to 400 billion miles by 2020, a 33% increase.

What are the Benefits of TOD?

The results of this study indicate that implementing TOD can have significant benefits to individuals, communities, regions, and the state as a whole. (The extent that these benefits are realized depends on whether developments have the primary characteristics of TOD, as well as on the type and quality of transit service available.)

Ten major areas of benefits from TOD are:

Several demographic trends are expected to contribute favorably to the market demand for Transit-Oriented Development

- **TOD can provide mobility choices.** By creating "activity nodes" linked by transit, TOD provides important mobility options, very much needed in the state's most congested metropolitan areas. This also allows young people, the elderly, people who prefer not to drive, and those who don't own cars the ability to get around.

- **TOD can increase public safety.** By creating active places that are busy through the day and evening and providing "eyes on the street", TOD helps increase safety for pedestrians, transit-users, and many others.

- **TOD can increase transit ridership.** TOD improves the efficiency and effectiveness of our transit service investments by increasing the use of transit near stations by 20 to 40 percent.

Housing at Hazard Station, San Diego, CA
The City of San Diego has been a willing partner in supporting both mass transportation and TOD. The City was one of the first in the nation to adopt "Transit-Oriented Development Design Guidelines" in 1992.

- **TOD can reduce rates of vehicle miles traveled (VMT).** Vehicle travel in California has increased faster than the state's population for years. TOD can lower annual household rates of driving by 20 to 40% for those living, working, and/or shopping near transit stations.

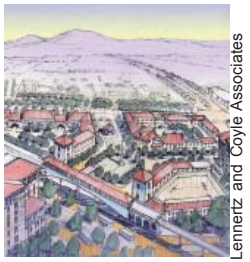
- **TOD can increase households' disposable income.** Housing and transportation are the first and second largest household expenses, respectively. TOD can free-up disposable income by reducing driving costs; saving $3-4,000 per year for each household.

- **TOD reduces air pollution and energy consumption rates.** By providing safe and easy pedestrian access to transit, TOD can lower rates of air pollution and energy consumption. Also, TODs can reduce rates of greenhouse gas emissions by 2.5 to 3.7 tons per year for each household.

- **TOD can help conserve resource lands and open space.** Because TOD consumes less land than low-density, auto-oriented growth, it reduces the need to convert farmland and open spaces to development.

TOD Profile: Pleasant Hill, BART Station Area

TOD planning for the Pleasant Hill BART station in Contra Costa County is now entering its second generation following the initial Specific Area Plan developed in the 1980s. Following a charette process the County, BART and the community reached a consensus in March 2001 to turn BART's 18-acre surface parking lot into a TOD.



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The draft project proposal includes: 411,000 square feet of office space, up to 345 apartments and townhouses (up to 50 for-sale units) a town square and community green, a child care facility, and about 40,000 square feet of ground floor retail and restaurants. All 1,477 of BART's commuter parking spaces would be replaced in structured parking.

Subject to negotiations, the Redevelopment Agency will finance the replacement of BART parking, be a partner in the long-term lease and will receive a proportionate share of the revenues.

TOD Profile: EmeryStation, Emeryville

EmeryStation is a 20-acre mixed-use TOD anchored by a busy Amtrak station. The site is a former contaminated 'brownfield' located in the East Bay of the San Francisco Bay Area. The developer, Wareham Properties, and the City provided the leadership to implement the project. The project includes reuse of old industrial buildings and new construction.

Wareham Properties

Before

After

The project was initiated by Amtrak (Capital Corridor), which was interested in locating a train station in Emeryville. Amtrak offered to pay lease expenses for a station. Wareham agreed to build a new rail station on land leased from the city. In 1998, construction began on Emery Station Plaza, a three-building, 550,000 square foot mixed-use complex on the north, east, and south sides of the Amtrak station.

Approximately 150 units of owner-occupied loft and town home developments, plus a senior housing project, have been constructed. At build-out, the investment in EmeryStation is estimated to total $200 million.

Parsons Brinckerhoff

San Francisco Embarcadero Light-Rail Transit
San Francisco Muni is entering into its first joint development project following the construction of a new light-rail line to the South Beach area. A 65-year ground lease is expected to generate $311 million in revenue for Muni, while an additional $540 million in other taxes will flow into the City of San Francisco.

- **TOD can play a role in economic development.** TOD is increasingly used as a tool to help revitalize aging downtowns and declining urban neighborhoods, and to enhance tax revenues for local jurisdictions.

- **TOD can decrease infrastructure costs.** Depending on local circumstances, TOD can help reduce overall infrastructure costs for expanding water, sewage and roads to local governments by up to 25% through more compact and infill development.

- **TOD can contribute to more affordable housing.** TOD can add to the supply of affordable housing by providing lower-cost and accessible housing, and by reducing household transportation expenditures. Housing costs for land and structures can be significantly reduced through more compact growth patterns.

What is the market for TOD?

In California and across America, a number of TODs have been built and are performing well in the marketplace. This indicates that the viability of TOD at many locations in today's California real estate market is not a significant concern.

However, at the same time, there are still not sufficient financial resources to implement TOD at a large number of transit stations in California. This is particularly true for building affordable housing and parking structures.

Mixed-use TODs remain a challenge to finance and implement. And TODs with a retail element historically have proven to be the most challenging in two regards – for financial performance and for adherence to TOD design principals.

TrizecHahn Ehrenkrantz Eckstut & Kuhn Architects

Hollywood/Highland, Los Angeles, CA
The Los Angeles County Metropolitan Transportation Authority (MTA) has focused its efforts on joint development of agency-owned properties, resulting in projects such as Hollywood/Highland near a Red Line subway station.

Trends Point to Increasing Demand

Several broad demographic trends influencing California's future are expected to contribute favorably to the market demand for TODs. For housing, these trends not only include unprecedented population and household growth, but a shortfall of housing production and a significant need for housing that is affordable to many households in California. Regarding employment, recent trends include increased numbers of jobs, particularly in the state's major metropolitan areas. These trends, along with a growing demand for urban housing that offers reduced commute times and urban amenities, point to increasing market demand for TOD projects, especially within the state's major metropolitan areas.

TrizecHahn Ehrenkrantz Eckstut & Kuhn Architects

Parsons Brinckerhoff

Bay Area Rapid Transit Pleasant Hill Station, CA
BART has a complex history with TOD. The original premise was that development at stations would naturally occur so no concerted TOD effort was undertaken. BART now has an extensive joint development and station area planning program in concert with local jurisdictions at many of its stations.

Funding for TODs

Whether real or perceived, many developers believe there are significant barriers to overcome in trying to secure funding for TODs. These barriers include: the belief that mixed-use developments are risky, difficulty in appraising TODs using traditional appraisal methods, and a perceived unwillingness of investors to fund developments in central cities.

Three things are required for TOD projects to overcome a financiers' hesitation and to increase their chances to obtain financing:

- **Well-planned phasing.** Some component of the overall development needs to start generating cash flow early while the remaining phases of the TOD are completed.
- **Solid track record.** Develop a solid track record for implementing projects and conduct accurate market studies.
- **Multiple sources of capital**. Having multiple capital sources with varying investment timelines allows a development to satisfy the higher rate of return on some short-term capital sources.

There are only a handful of private or public capital sources specifically targeted to TOD, and those sources have a tendency to be modest in scale. Not surprisingly, successful TOD projects are often funded from sources that are available to a variety of projects. TODs in California with affordable housing typically rely on seven or more funding sources. For example, the Fruitvale Transit Village in Oakland has 20 different sources of funds, all with different rules.

What is happening with TOD in California?

There is more activity with TOD planning and implementation in California now than at any time during the last century. At every major transit agency that was surveyed for this study, there are at least one or more new TOD projects currently underway at its bus and/or rail stations. For some transit systems, these are the first TODs the transit agency has been directly involved with, even after more than a decade of providing rail service.

There are many major barriers that limit implementation of Transit-Oriented Development in California

The history of TOD in California is both an encouraging story and one of missed opportunities. California has recently produced a number of new TODs across the state, and bus and rail TOD have been shown to be an effective tool to help shape growth and provide mobility alternatives. Yet, while interest in TOD is significant, the reality in California is that TOD is the exception and not the rule at most major transit stations. The dominant land use around the majority of the California's significant bus and rail stops is low-density automobile-oriented development that does not take advantage of proximity to high-quality transit service and does not provide optimal access to transit stations.

What are the Major Barriers to Implementing TOD in California?

Although the community and transportation benefits of TOD can be significant, there are still many major barriers that limit the broader implementation of TOD in California.

Based on this study's review of TOD, it is possible to summarize the major barriers into the following broad areas:

- **Transit system design**. The design of transit systems can be a major barrier to successful TOD. Stations often have poor pedestrian access, and broad expanses of surface-level parking lots often separate the stations from the surrounding community. Stations and transit corridors are often located in areas with little to no development potential, reducing transit's ability to link activity centers.

- **Local community concerns.** To local neighborhoods, proposals for TOD projects often are met with concerns about changing the character of a community. Even with quality design and appropriate density, and despite local government support for a TOD, community concerns about density and traffic are often huge hurdles to implementation.

- **Local zoning not transit-friendly**. In many major transit station areas in the state, local zoning has not been changed to reflect the presence of transit. Local development codes around stations often tend to favor low density, auto-oriented uses. Creating and implementing transit-friendly zoning becomes an additional challenge.

Jay Paul Company

Moffett Park, Sunnyvale, CA
The City of Sunnyvale's Transportation Demand Management (TDM) ordinance helped create an "unintentional TOD" at Moffett Park leveraged by the developer's ability to build a bigger building with a TOD design. A $2.5 million privately financed light rail station serves the project.

- **Higher developer risk & cost.** Mixed-use, higher density projects with reduced amounts of parking (such as in TOD) can significantly increase risks for developers and financiers. TOD can be more costly, and subject to added regulations and more complex local approval processes, as compared to conventional "auto-oriented" development.

- **Financing difficult to obtain.** Obtaining private financing for TODs is often also a barrier. Lenders typically have concerns about financing mixed-use projects or those with lower parking ratios (which are typical in TOD). Public financing available for implementing TOD is very limited and often difficult to obtain in California.

Jay Paul Company

Parking Reductions for TOD

TOD offers significant opportunities to reduce the number of parking spaces below conventional parking requirements typical for retail, office and residential land uses. TOD provides these opportunities by increasing transit accessibility and combining a mixture of land uses. The design and location of TODs enables a reduction in the number of parking spaces needed. The resulting cost savings can be significant. Reduced parking requirements can lower TOD construction costs, which in turn helps make housing more affordable and/or allows more development to be built on sites near transit. For example, in one case study of six San Francisco neighborhoods, reducing the standard requirement for off-street parking was found to decrease costs for condominiums by more than ten percent.

Research indicates TOD offers the potential to reduce parking per household on the order of approximately 20%, as compared to non transit-oriented land uses. A wide range of parking reductions has also been found for commercial parking in TODs. However, to date, there are no clear conclusions regarding how much parking may reasonably be reduced for any particular TOD. Therefore, parking need calculations must be made on a site-by-site basis.

How can the state of California facilitate TOD implementation?

Recommendations regarding potential state-level strategies to encourage broader implementation of TOD emerged from an extensive process that lasted over a year. Based on the results of this process, the Policy Steering Committee to the Statewide Transit-Oriented Development Study recommended fourteen promising state-level strategies to assist in overcoming TOD implementation barriers. These strategies can be grouped into two broad areas, as follows:

Strategy Area #1: State Policies and Practices

Strategies in this category include:

- Encouraging improved coordination of land use and transportation planning at local and regional levels.
- Facilitating the use and sale of state-owned land near major transit stations for TOD.
- Examining state environmental review requirements in relation to TOD to determine whether changes may be indicated to reduce barriers.
- Contributing to improved data on travel and economic impacts of TOD, and incorporating data into improved analysis and decision-making tools; and
- Providing information and technical assistance on TOD implementation.

Transit-Oriented Development has the potential to reduce parking per household by approximately 20%

The state can encourage local agencies to more closely link land use practices that promote a transit-friendly urban form by providing information, funding for planning, and by fostering cooperation. TOD proponents often face significant delays and difficulties when trying to secure local land use approvals for projects, even in areas where regional and local policies are supportive of this type of development.

In addition, the state can provide direct assistance for TOD implementation by reducing existing barriers to leasing or purchasing state-owned “excess” and/or underutilized land located near major transit stations. There is also an important role for the state in developing and disseminating data and information about the effects and benefits of TOD regarding travel, economic, and social benefits and impacts. This information is necessary in order to improve the accuracy of analysis prepared for proposed TOD projects and also could help expedite local land use approval processes.

Strategy Area #2: State Funding for Planning and Implementation

This study recommends that the state of California could help overcome barriers to implementing TOD by:

- Providing funding to local jurisdictions to prepare plans and adopt ordinances that facilitate transit-oriented development.
- Providing financial incentives to enable local agencies and private organizations to implement TOD.
- Offering funding for specific types of TOD demonstration projects.
- Changing existing law to allow local agencies to provide 'tax-increment financing' around major transit stations, even if they are located outside redevelopment areas.
- Allowing greater flexibility in the use of state transportation funds for TOD; and
- Helping to make private TOD mortgage instruments (such as the "Location Efficient Mortgage" (LEM) program more widely available.

The Transit Villages Act of 1994 is acknowledged by many as the most important step in California, at the state level, regarding TOD. This act provides for cities and counties to prepare plans for 'transit village' districts near major existing or planned transit stations. It stipulates that transit villages should contain a mixture of land uses, and it establishes that transit village plans are eligible for transportation funding.

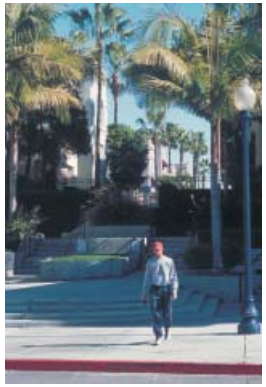
However, although this legislation is an important step, it provides no funding for implementing TOD, which has been a major barrier to its wider implementation in California.

Research conducted for this study indicates that there is an overall strong real estate market outlook in California for TOD, and favorable demographic trends in the major metropolitan areas of the state. However, even so, TOD project proponents widely report that they often encounter significant difficulty obtaining private financing to implement TOD projects. Public funding for TOD implementation in California is very scarce, outside established local redevelopment areas. The mixed-use aspect of many TOD projects tends to complicate the process of obtaining development financing, and the high cost of building parking structures can add significantly to project costs. Obtaining financing for affordable housing within TODs can be extremely complex because these projects typically require multiple funding sources with widely varying requirements.

To complicate the situation, local jurisdictions often lack the necessary funding to be able to prepare TOD plans or development ordinances. In addition, local agencies typically lack the ability to provide effective financial incentives or assistance to encourage the development of quality TODs, unless a project is located within an established redevelopment area where tax-increment financing may be available.

TOD Profile:
Uptown District, San Diego

The Uptown district is a 14-acre mixed-use bus TOD put together under the leadership of the City of San Diego. For this project, San Diego wanted to showcase a mixed-use development. There was no public opposition to the project since it required relatively little change to the community (the site was a former Sears store in an existing mixed-use community).



The residential component has 320 units at an average density of 43 units per net acre; the 145,000 square feet of retail and commercial space includes a 42,500 square foot supermarket. The Uptown project was financed by the redevelopment agency and has been successful in creating a community where it is convenient to walk to shopping and where transit service is excellent.

The project is parked conventionally; no special parking reductions were implemented to account for the presence of transit. The parking ratio for commercial is 1 space per 285 square feet and 2.25 spaces per unit for the residential. Residential and supermarket parking is underground, and street level spaces are available for retail shoppers.

TOD in America

A TOD renaissance is underway across America. More so than at anytime in recent history there is heightened interest in planning for and implementing TOD.

The forces driving America's TOD renaissance include: escalating traffic congestion increasing the attractiveness of sites close to rail; an increased trend of Americans moving back into America's cities; demographic changes underpinning an expanding market for higher density mixed-use communities; increased support for smart growth and the strategies necessary to implement it; changes in Federal Transit Administration policies for transit 'joint development' and an emphasis on transit-supportive land uses in funding recommendations for new rail starts; and finally, more transit agencies are starting to realize they are in both the community-building and the people-moving businesses.

Parsons Brinckerhoff

Orenco Station in Portland, Oregon

One of the lessons for succeeding with TOD is the need to start TOD planning very early in the project development process. Decisions on alignment, where to put stations and the layout of transit facilities all can make a huge difference between a successful or unsuccessful TOD strategy.

Miami-Dade Transit

Miami Metrorail in downtown Miami, Florida

Furthermore, repairing the problem after the transit facility is built is costly, time consuming and difficult. Solving problems early-on means bringing an expanded 'cast of characters' to the table.

To enhance coordination, engineers and transit planners designing transit systems need to work closely with land use planners, real estate economists, architects, landowners, and residents. In addition, land-use planners should coordinate with transit agencies in planning and locating transit-supportive development.

To better achieve broader implementation of TOD, public policy will be essential to help shape what happens in forthcoming real estate cycles.

Detailed descriptions of these strategies are provided in chapter 9 of the report, "*Statewide Transit-Oriented Development Study: Factors for Success in California*".

How to Obtain a Copy of this Report

The *Statewide Transit-Oriented Development Study* report, the Technical Appendix volume, and related special reports, are available for download from the website of the California Department of Transportation,
Division of Mass Transportation, at:
http://www.dot.ca.gov/hq/MassTrans/tod.htm

To obtain a printed copy of these items, you may contact staff of the Division of Mass Transportation, by calling:
916-654-8811

The reports include:

- Statewide Transit-Oriented Development Study: Factors for Success in California
- Appendix to the Statewide Transit-Oriented Development Study (separate volume)
- Parking and TOD: Challenges and Opportunities (special report)

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For additional information and documentation please refer to the final report and technical appendix: *"Statewide Transit-Oriented Development Study: Factors for Success in California"*, which is accessible via the Internet at:
http://www.dot.ca.gov/hq/MassTrans/tod.htm

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